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| 09/377,827                   | 08/20/1999  | AKIRA SUGIYAMA       |                     | 8358             |
| 7590                         |             | 09/23/2009           | EXAMINER            |                  |
| AKIRA SUGIYAMA               |             |                      | FLETCHER, MARLON T  |                  |
| 3-1-27-102 FUJINOKIDAIDANCHI |             |                      | ART UNIT            | PAPER NUMBER     |
| SUGESENGOKU, TAMA-KU         |             |                      |                     | 2832             |
| KAWASAKI-SHI, KANAGAWA-KEN,  |             |                      |                     |                  |
| JAPAN                        |             |                      |                     |                  |

  

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* AKIRA SUGIYAMA

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Appeal 2009-012806  
Application 09/377,827  
Technology Center 2800

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Decided: September 23, 2009

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Before CATHERINE Q. TIMM, BEVERLY A. FRANKLIN, and  
LINDA M. GAUDETTE, *Administrative Patent Judges*.

GAUDETTE, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's decision finally rejecting claims 1-7 (Final Office Action, mailed Oct. 20, 2004, 1), the only claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

### STATEMENT OF THE CASE

The invention is directed to a data processor which converts non-musical input data into musical data in the form of scales on the music staff. (*See* Specification (“Spec.”), Summary of the Invention.)

The Examiner relies on the following evidence to establish unpatentability (Examiner’s Answer (“Ans.”), mailed Apr. 17, 2009, 3):

|          |           |               |
|----------|-----------|---------------|
| Tanimoto | 4,450,743 | May 29, 1984  |
| Satoh    | 5,038,659 | Aug. 13, 1991 |

Appellant requests review of the sole ground of rejection (Appeal Brief (“Br.”), filed Aug. 22, 2005, 5): claims 1-7 under 35 U.S.C. § 103(a) as unpatentable over Satoh in view of Tanimoto.

### ISSUE

Has Appellant shown that the Examiner’s proposed motivation for modifying Satoh’s apparatus to include Tanimoto’s note code table is based on improper hindsight reasoning?

We answer this question in the affirmative.

### FINDINGS OF FACT

1.Appealed claim 1 is reproduced below:

1. A data processor using a computer and a staff notation comprising:
  - a computer keyboard for input of character or symbol data, not related to musical data, into said data processor;
  - a note code table to correspond the inputted character or symbol data input into said data processor with musical data comprising scales of music staff notation;

a note decoder to decode the inputted character or symbol data to correspond to scale code data using said note code table;

a note code storage device to store output data from said note decoder in order as music staff notation data; and

an outputting means for outputting the music staff notation data from the note code storage device.

2. The Examiner finds that Satoh discloses the invention as claimed with the exception of “a table providing a listing of note codes that correspond to the input data, in the manner specifically claimed.” (Ans. 4.) The Examiner relies on Tanimoto for a disclosure of a data processor which utilizes a note code table as claimed, i.e., “a list corresponding data input to musical scales or phrases of music staff notation.” (Ans. 4.)

3. Satoh relates to “[a] musical score block copy forming apparatus.” (Abstract.) The apparatus includes a keyboard for inputting, into an arithmetic processing unit, the words of a musical score (col. 9, ll. 8-10; col. 10, 40-41) and a piano keyboard for inputting musical note data for the musical score (col. 9, ll. 37-38). The musical note data includes tone pitch data and tone duration data. (Col. 9, ll. 14-15.) The words are assigned to the corresponding musical notes of the score. (Col. 9, ll. 63-64.) The length of each word is calculated (col. 9, ll. 65-67) so that the words are properly positioned with respect to their corresponding notes (col. 11, ll. 24-25) when displayed on a screen and/or printed as a musical score block copy. (*See* col. 6, ll. 31-32 (“A note with a word must be moved so that adjacent words do not contact each other.”).) Data stored in the memory of the processing unit includes a Japanese conversion table. (Col. 9, ll. 13-16.) “The Japanese conversion table is used when words input in Roman

characters are converted to corresponding Japanese words.” (Col. 9, ll. 17-20.)

4. Tanimoto discloses an electronic musical instrument having a plurality of keys, including numeral keys (col. 3, ll. 8-11), which may be activated to define pitches of musical notes (col. 3, ll. 15-16) and durations of musical notes (col. 3, ll. 33-34). The Examiner identifies columns 5-6 of Tanimoto as illustrating the use of a note code table corresponding the input keys with the musical note data. (Ans. 4.) The note data is stored as musical information which may be read by a musical generator to produce audio music in response to the stored musical information. (Abstract.)

5. The Examiner’s proposed motivation for combining Satoh and Tanimoto is expressed as follows:

It would have been obvious to one of ordinary skill in the art [sic, art] at the time the invention was made to utilize the teachings of Tanimoto with the apparatus of Satoh et al., because Tanimoto provides a clear correlation of input data with stored table data including note codes [sic, codes] to produce output data, wherein Satoh et al. provide correlation of input data with output data, only failing to show a clear correlation with note codes. Satoh et al. clearly shows the correspondence of notes and input characters as seen in figures 18 and 19.

It would have been obvious in view of Satoh et al. to provide the input data corresponding with the notes or note codes, as taught by Tanimoto, wherein the combination provides teachings of input data to the conversion of output data, wherein the output data corresponds to musical data.

(Ans. 5.)

#### PRINCIPLES OF LAW

“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning

with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l v. Teleflex, Inc.*, 550 U.S. 398, 419 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). The fact finder must be aware “of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” *KSR*, 550 U.S. at 420 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 36 (1966) (warning against a “temptation to read into the prior art the teachings of the invention in issue”)).

## ANALYSIS

Appellant has persuasively argued that the Examiner’s proposed motivation for modifying Satoh’s apparatus to include Tanimoto’s note code table is based on improper hindsight reasoning. As pointed out by Appellant, Satoh uses separate input sources for entry of word data and musical note data. (App. Br. 12.) Satoh likewise outputs both the received word data and corresponding musical notes. (*Id.*) Satoh does not require any type of conversion of word data to musical note data, or conversion of musical note data to word data. (*Id.*) Rather, the only table required by Satoh is for conversion of Roman characters into Japanese characters. (*Id.*) The Examiner has not explained why the ordinary artisan would have been motivated to modify Satoh’s apparatus to include a note code table for converting input word data to musical note data other than identifying the disclosure of a note code table in Tanimoto. (See App. Br. 10 (characterizing the Examiner’s rejection as “based on the conclusion that, once combined, the two references disclose the presently claimed invention”)).

Appeal 2009-012806  
Application 09/377,827

## CONCLUSION

Appellant has identified reversible error in the Examiner's obvious determination. Therefore, we do not sustain the rejection of claims 1-7 under 35 U.S.C. § 103(a) as unpatentable over Satoh in view of Tanimoto

REVERSED

PL Initial:

sld

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